Questions & Answers
Concerning Air Permitting for the
Fiber Reinforced Plastics and Surface Coating Industry

This is a compilation of questions and answers concerning interpretations of the 326 IAC 2. For further confidential compliance assistance, contact the Office of Voluntary Compliance at 1-800-451-6027 and ask for ext. 2-8172 or 317-232-8172. For further non-confidential assistance, contact Rebecca Mason of the Permits Branch of the Office of Air Quality at 1-800-451-6027 ext. 3-9664 or 317-233-9664.

The statements in this factsheet are intended solely as guidance. This factsheet is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the Indiana Department of Environmental Management. Manufacturers should refer to 326 IAC 2 and the Indiana Register that will list any proposed and/or final amendments for applicable requirements.

The questions addressed below were raised in conjunction with a December 1999 permitting workshop for the fiber reinforced plastic (FRP) industry. To the extent the questions are similar or the same, the questions have been grouped together with one response.

Note: This document only addresses minor stationary source situations and not major stationary source situations with respect to Prevention of Significant Deterioration (PSD) and Emission Offset (refer to the definition of major stationary source in 326 IAC 2-2-1 and 326 IAC 2-3-1). The situations described in this document are not intended to explain permit modifications subject to the PSD or Emission Offset rules.

This document attempts to explain permitting situations, however, there may always be source-specific exceptions due to how an existing permit is written or due to the configuration of a source that are not readily apparent to a source or to IDEM without formal review. In order to receive a formal determination from IDEM regarding a change, a source must submit an application to IDEM for review. When this document states that no notification is required, if a formal determination is not issued by IDEM, the burden of proof that no notification is required rests with the source. If the source makes a change that the source has determined to be exempt from permitting, the source makes the change at their own risk.

BACKGROUND PERMITTING INFORMATION

This section was included to provide a summary of IDEM's permitting procedures as a background for all of the questions addressed in this document. Therefore, several answers will refer to this section for clarification.

In December 1998, the Article 2 rules were revised with the following intentions:

- To provide a number of specific exemptions from construction permitting;
- To place the remaining requirements for both new and modified equipment and changes to operating conditions into the one section of the rule that governs a source's plant-wide level of approval; and
- To provide additional exemptions or lower the level of approval required for some changes in order to correlate the level of approval with the environmental significance of a particular change while conforming with federal requirements.

Thus, the construction and operating permit approval process for most of the approvals that IDEM, OAQ issues were combined or changed.

The types of modifications or revisions to the levels of approval discussed in this document are summarized in the attached Tables 1 through 5. The construction and operation permit approvals are combined into one type of revision approval for exempt sources, registered sources, minor sources, and sources with Federally Enforceable State Operating Permits (FESOPs). If an exempt source was issued a letter of exemption by IDEM and makes a change, but, despite the change, the source is still exempt from the requirement to apply for a permit, the source may request a new letter of exemption including the new information from IDEM. If a registered source makes a change, but still qualifies as a registration, the source may need a Notice-Only change or a revised registration. If a minor source with a Minor Source Operating Permit (MSOP) makes a change, but still qualifies as a minor source, the source may need one of the following approvals: a Notice-Only change; a minor permit revision; or a significant permit revision. If a FESOP source makes a change, but still qualifies as a FESOP, the source may need one of the following approvals: an administrative permit amendment; a minor permit revision; or a significant permit revision.

For Title V or Part 70 sources, the construction approval is called a source modification and operating approval is called a permit modification. In other words, IDEM has to issue approval to modify the source and then has to modify the source's operating permit; two types of permitting are required for a change to a Part 70 source. It is for this case in particular that Article 2 was revised to better coordinate the construction approval with operating approval. Federal requirements are very prescriptive regarding modifications to Title V operating permits. If a Title V operating permit has been issued to a Part 70 source, then a source modification always results in the need for a permit modification as well. In addition, an administrative amendment or a permit modification can be required at a Part 70 source without a source modification if a change is made that is not necessarily a physical

change but a change that affects the permit information. If a Part 70 source makes a change described in 326 IAC 2-7-10.5, the source will need a minor source modification or a significant source modification. If a Part 70 source makes a change that affects the permit information or gets a source modification, the source may need one of the following approvals: an administrative amendment; a minor permit modification; or a significant permit modification.

The following sections and Tables 1 through 5 summarize the procedures for the approvals for changes to these types of existing sources.

Exemptions and Insignificant Activities

A change at an existing source can qualify as exempt from construction and possibly operation permitting (and therefore notification) in two ways. If a change is in a category listed in 326 IAC 2-1.1-3, it is exempt. If the change is not in one of the listed categories, the PTE of the change itself determines whether the change is exempt from construction notification and permitting.

There are a few caveats to the list of modifications that can qualify as exempt that were added in Section 8 of House Enrolled Act (HEA) Number 1343 (HEA 1343) on March 16, 2000. HEA 1343 voided 326 IAC 2-1.1-3(b) and stated that the PTE does not matter for those items that are specifically listed in the exemptions unless one or more of the following situations would occur: the construction or modification would be subject to 326 IAC 2-2 (PSD) or 326 IAC 2-3 (Emission Offset); or the construction or modification would be a Title I modification at a Part 70 source; or the construction or modification would result in the source needing to transition into a different level of operating permit. If one of those situations occur, the construction or modification is not exempt, and IDEM must be notified and a permit must be issued prior to making the change. A copy of HEA 1343 is attached.

For Part 70 and FESOP Sources, exemptions defined in 326 IAC 2-1.1-3 are incorporated by reference as insignificant activities. Insignificant activities are listed in 326 IAC 2-7-1.

The rules should be consulted to determine whether these exceptions to notification apply. A source with any level of permit can submit an application and ask for a formal determination of an exemption from construction permitting from IDEM. A summary of relevant information regarding exemptions is provided in Table 1. An operating permit modification or revision may be required even for exempt changes if any of the information in the permit is affected by the change. For example, if descriptive information in the permit changes or if a new rule is applicable due to the change, the source may need to revise their operating permit. The type of revision required depends on the type of permit the source has and what information actually changed in the permit.

Notice-Only Changes and Administrative Permit Amendments

Beyond exemptions and insignificant activities, some kinds of changes are called "Notice-Only" changes or administrative permit amendments. These changes are not exempt from permitting, but do not require prior notification, i.e., the change can be made and operated simultaneously with or, in some cases, prior to notifying IDEM. Some actual physical changes at a plant that can qualify as Notice-Only changes to registrations and MSOPs and administrative permit amendments to FESOPs are changes that would require more frequent monitoring or reporting, certain kinds of pollution control projects, some changes with HAP PTE below threshold levels, and some changes that involve replacement and repair of equipment. These types of changes are listed in 326 IAC 2-5.5-6(d), 2-6.1-6(d), and 2-8-10.

Administrative amendments can be made to a Part 70 source also, but no physical change can qualify as an administrative permit amendment.

Source Modifications and Permit Revisions

If the change is neither exempt, a Notice-Only change, nor an administrative permit amendment and the change is a physical change to the plant, the source is required to submit an application for source modification approval for a Part 70 source or a permit revision for a source with a MSOP or FESOP (these types of modifications used to be called "construction permits," a term which is now reserved only for new greenfield construction). The application must be submitted prior to making the change, and the source must wait for IDEM approval to construct or modify and operate. Sources have to give IDEM prior notification in the form of an application and must wait for approval, which depending on the type of permit the source holds and the kind of source modification requested can take 45, 120, or 270 days from the receipt of the application.

Part 70 Permit Modifications

While Article 2 combines the state construction and operating approval processes for sources that aren't subject to Part 70, federal Part 70 rules incorporated by Article 2 still treat the construction and operating approvals as separate events. Therefore, IDEM attempts to efficiently combine the construction and operating approval processes for Part 70 sources by concurrently writing the appropriate source modification and permit modification approvals and providing for concurrent public comment. IDEM issues the source modification approval after resolving any issues raised during the public comment period, allows for EPA review of the permit modification approval, and then issues the permit modification approval. This concurrent review is allowed when the source submits a complete application containing the information required for the construction approval and operating permit approval in accordance with 326 IAC 2-7-10.5(c)(1) and (2). Otherwise, the source may request operating approval in a separate application submitted after receiving the appropriate source modification approval.

In either the concurrent review or separate review instances, revising the Part 70 operating permit to incorporate a source modification can proceed either by an administrative permit amendment or by a minor or significant permit modification. To incorporate a source modification by an administrative permit amendment may take up to 45 days for EPA review. To do so via a minor permit modification may take up to 90 days and via a significant permit modification may take 9 months. Construction can commence after receiving source modification approval, but in most cases, the modification cannot be operated until the operating permit is modified. IDEM will determine what type of operating permit modification is required in accordance with 326 IAC 2-7-11 and 2-7-12.

Part 70 permit modifications may also be required for changes other than incorporating a source modification.

GENERAL PERMITTING

- **[How] Is IDEM permitting gel coat/resin booths and application systems?**

How to permit emitting activities depends on the applicable rules and regulations. If a rule is specific to the industry, that rule will define what are the subject operations or activities and what are the standards, emissions limitations, testing, monitoring, record keeping, and reporting requirements that must be specified in a permit. For example, the new Indiana Styrene Rule (326 IAC 20-25) has separate standards for applying different types of resins and gel coats. Therefore, it is important that standards for all the types of resins and gel coats used by a source are included in the permit.

Volatile organic compound (VOC) emissions from the FRP and surface coating industries may be subject to other rules that are not specific to any industry or process type. These are rules for new sources and changes to existing sources built in non-attainment areas (326 IAC 2-3, Emission Offset and 326 IAC 8-7, Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties) and attainment areas (326 IAC 2-2, Prevention of Significant Deterioration (PSD) and 326 IAC 8-1-6 New [VOC] Facilities; General Reduction Requirements). None of these rules defines the emitting activities and rather rely on the terms “source” and “facility.” The Emission Offset and PSD rules are federal programs but leave it to the permitting authority, IDEM, to determine what is the source subject to permitting. These determinations of what is the source are made on a case-by-case basis and according to published criteria. The New [VOC] Facilities rule is a state rule that applies to a “facility,” which is similar to an “emissions unit,” a term discussed in greater detail later.

There is a federal rule also for HAP emissions from new sources, (Section 112(g), incorporated by reference in 326 IAC 2-4.1) that is not specific to any industry and can apply to the FRP and surface coating industries. As a federal rule, it applies to “sources” too, but again leaves the determination of the source subject to permitting to IDEM, again according to very specific guidelines. Permitting FRP resin/gel coat application under any of the regulations mentioned above requires applicants and IDEM to determine how resin/gel coat application fits into the definitions of “source” and “facility.”

Finally, Article 2, Permit Review Rules, applies to all new and existing operations. Article 2 refers to both the terms "source" and "emissions unit," and once these two terms are defined for the specific situation, the answer of how to permit their operation and modification relies in most cases on the potential to emit (PTE) of the source or emissions unit.

The answer to this question can be an involved one that may depend on many factors. The terms "source," "facility," "emissions unit," and "PTE" must be discussed and defined, and the answer may depend on the applicable rules and regulations for the situation. To the extent possible, the rest of this document will attempt to provide a single, consistent answer to the subsequent questions for the FRP and surface coating industries.

EMISSIONS UNITS

- **What are some examples of emissions units for the FRP industry?**
- **Is there a difference in permitting a [spray] booth or the application system within a booth?**
- **In a gel coat or resin application booth, is the booth the emissions unit or is each spray gun an emissions unit?**
- **If I had 3 gel coat guns in a spray booth and then add 3 more gel coat guns, do I now have 6 emissions units or still just 1 total emissions unit?**
- **What about for a paint booth?**

What is an Emissions Unit?

When Article 2 was revised, the definition of "emissions unit" was added at 326 IAC 1-2-23.5:

> "Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant under the Clean Air Act (CAA).

A source can be the entire plant site and can be composed of several emissions units, or a source can be just the emissions unit itself if an applicable rule defines the source as such. Prior to adding this definition, the term "facility" was frequently used, which is defined at 326 IAC 1-2-27 as:

> Any one (1) structure, piece of equipment, installation or operation which emits or has the potential to emit any air contaminant. Single pieces of equipment or installations with multiple emission points shall be considered a facility for the purpose of this rule.

In most of Article 2, the terms are essentially synonymous, however, there are differences in other articles, such as Article 8. Again, it must be emphasized that the applicable rule or regulation can determine the definition of emitting activities and the kind of permitting that is required.

How are emissions units identified?

In the FRP and surface coating industries, emissions units are generally defined by the equipment that is part of the emitting activity, the product being made or coated, and the ability of the equipment to operate independently. Since the PTE of the emissions unit is defined by the ability of the emissions unit to apply emitting material (i.e., resin, gel coat, paint), the emissions unit description helps IDEM determine the PTE of the emissions unit by including information such as the product processed, the throughput of the product processed (e.g., ten FRP parts per hour), and the maximum throughput of emitting materials used by the emissions unit (i.e., gel, resin, or coating). Therefore, the number of guns is included in the emissions unit description at times. The emissions unit description is not enforceable; however, it is a reference for how the PTE of the emissions unit was calculated. Since changes to the emissions unit description may affect PTE calculations, it is important for sources to carefully examine any change to the emissions unit description. In addition, as discussed in the "Background Permitting Information" section, a change in the emissions unit description may also require some type of permit amendment, revision, or modification.

Example emissions unit description: "One resin application operation consisting of two guns and supporting equipment in one booth, capable of processing 10 FRP panels per hour and applying 15 pounds of resin per hour."

For the example description, the guns are not considered discrete emissions units, so the following activities can be considered exempt:

- Replacing a gun if the replacement does not increase the panels processed, the 15 pounds of resin per hour applied, or the amount of VOC emitted per pound of resin; and
- Adding a third gun if the third gun does not increase the panels processed, the 15 pounds of resin per hour applied, or the amount of VOC emitted per pound of resin.

However, in the case of adding the third gun, the source should apply for a change to the descriptive information upon adding the gun in the form of a notice-only change for a minor source or an administrative amendment for a FESOP or Part 70 source

POTENTIAL TO EMIT (PTE)

- **How do you take spray booths into account for PTE?**

The PTE of a source or emissions unit is perhaps the most important criterion in air permitting. It is used to determine which rules apply and what level of permitting is in order. For instance, the federal rule for HAP emissions from new sources incorporated in 326 IAC 2-4.1 only applies to a new major source of HAP as defined by 40 CFR 63.41. A major source of HAP is a source that emits or has PTE greater than 10 tons per year of an individual HAP or 25 tons per year of all combined HAP. Thus, what is important is to determine whether the new source will have PTE greater than 10 or 25 tons of HAP to see if the new source toxics rule even applies. The same is true for the Indiana Styrene Rule, whether the source is subject to the rule is based on its HAP PTE.

An emissions unit's PTE is also the criterion for determining what kind of permitting is required initially. The PTE is what determines whether a plant site is exempt from permitting or has to obtain a registration, MSOP, FESOP, or a Part 70 (Title V) operating permit. Most questions have to do with the permitting required when changes are made to an existing emissions unit, and these questions will be discussed in the next section.

As with any kind of surface coating operation, the emissions from resin and gel coat application occur during the spray and cure of the material. Hence, the PTE of a surface coating emissions unit is based fundamentally on the maximum amount of surface coating that can be applied in the emissions unit, i.e., the spray booth. The maximum amount of material that can be applied in an hour is usually what is required to be determined, then that number is scaled up to 8,760 hours of potential production per year (i.e., 24 hours a day, 365 days a year).

The maximum amount of material applied does not have to be the maximum amount the spray guns can deliver. Federal guidance recognizes that spray guns are not always operated continuously and are often turned off as parts or product are brought into or removed from the booth. Where it makes sense, applicants can determine the maximum number of parts or products that can be processed and the maximum amount of coating applied in a booth in an hour of peak production. Then it is assumed the coating being applied is the one that gives the highest emissions per part specific to each pollutant, either because of the large amount of material applied, the solids content of the material, the HAP content of the material, the VOC content of the material, or a combination of the amount and composition of the material. This amount of coating material multiplied by the maximum parts/product throughput yields the maximum hourly raw material application and emissions, which is scaled up to 8760 hr/yr .

Even though PTE for resin/gel coat application does not have to depend on the maximum amount of resin/gel coat that the gun(s) can deliver, if the gun(s) spray capability is the limiting factor, the PTE should be based on it. The capability to spray can also be translated into a maximum amount of part/product that can therefore be put through the booth each hour; they may be related functions of each other. The size of the booth could also be the factor limiting PTE. As a corollary, where there is no booth per se, the limit to PTE probably is the number of spray guns and their spray capability. All of these factors need to be considered to determine PTE in the FRP and surface coating industries.

For modifications to existing sources and emissions units, the PTE of the modification is determined by examining if the throughput can be changed by the modification, even if the source doesn't actually intend to increase throughput because of the modification, and determining by how much it can potentially increase. PTE with regard to modifications is discussed more specifically in the "Modifications and Changes" section.

MODIFICATIONS AND CHANGES

Note: This document only addresses sources that are not considered major sources under the PSD or Emission Offset rules. If your source is a major source under PSD or Emission Offset, many physical or operational changes require review that wouldn't be required of a minor source.

Notification

- **What are some examples of when we need to notify IDEM about changes to our plant? (addition of application equipment, addition of spray booth, change formulation of resins and gelcoats, etc)**

IDEM must be notified of all physical changes made at a plant (source) with two exceptions. The two exceptions to notification are changes that are exempt and changes to sources holding FESOPs and Part 70 operating permits that constitute insignificant activities and do not cause a source to exceed an emission limit or threshold for permitting. Refer to the "Background Permitting Information" for a more detailed discussion on what can and cannot be considered an exemption and what permitting changes may still be necessary for exemptions. For all other changes that require notification, in a few cases the change can be made first and IDEM can be notified simultaneously or afterwards within a specified time period. Most kinds of changes require notification and/or IDEM approval through permitting prior to making the change. The kind of notification depends both on the kind of change and the type of operating permit the plant has or will have. The types of permit changes and notification levels are discussed in the "Background Permitting Information" section and Tables 1 through 5. The notification is necessary for IDEM to determine whether permitting will be necessary.

- **Do I have to notify IDEM if changes I make do not increase my PTE?**

In general, if the source is a minor source under 326 IAC 2-2 or 326 IAC 2-3 (e.g., for surface coating and FRP sources in attainment areas, the source has the potential to emit less than 250 tons per year of VOCs), the source does not typically have to notify IDEM to obtain preconstruction approval if the change doesn't increase the PTE. However, for changes in operation, the source may need to modify the permit to include the change if the change affects the applicability or content of permit conditions (e.g., compliance monitoring changes). Changes that qualify as exempt or insignificant activities are the only ones that do not require IDEM notification (refer to the "Background Permitting Information" section for a discussion of exemptions). If the determination that a change is exempt is based on its PTE, the source should be very careful in determining whether or not the PTE will be increased. As mentioned in the "Background Permitting Information" section, a source can always submit an application to IDEM to receive a formal determination of whether a change is exempt from notification and permitting either categorically or by PTE. Later discussions below will give some guidance on what kinds of modifications are likely to be considered as increasing PTE.

- **Do I have to notify IDEM about changes that increase our actual emissions but not over the permit threshold?**

Unless it is exempt or a listed insignificant activity that also does not increase emissions such that a new rule becomes applicable or the exceptions in HEA 1343 are triggered, IDEM must be notified of a physical change, even if the non-exempt change does not result in an increase in actual emissions. In fact, a change could decrease actual emissions but still have to be permitted first if the change makes the source subject to a new rule. Again, the change in PTE due to the change and the kind of permit that the plant holds is what determines whether notification only is sufficient or whether notification and permitting approval is required prior to making the change. Refer to the "Background Permitting Information" section and Tables 1 through 5 for a summary of types of notification and permitting approval.

There are different kinds of permit "thresholds." Emission limits are a kind of permit threshold. Another kind of threshold is the cut-off between different levels of permitting (exemption, registration, MSOP, FESOP, Part 70 operating permit, or minor and significant modifications and revisions). It is assumed here that the change referred to in the question is an actual physical change to the plant. Simply a change in production rate that does not involve physical change that increases actual emissions requires no notification as long as no permit threshold, emission limit, or production limit is exceeded. The level of permitting is typically based on operation at the maximum production rate, unless the source elects to take a limit in a permit or a rule establishes a limit restricting the source below maximum production.

A source can make a physical change that increases actual emissions and elect to remain under current permit thresholds such as emission limits or level of permit except for registrations or, in some cases, MSOPs (i.e., an MSOP cannot be used to limit a source's emissions below Part 70 thresholds). However, such an election can only be made through the application process (i.e., prior notification), and the change cannot be made until receiving approval from IDEM in the form of a permit revision (MSOP or FESOP source) or a source and permit modification (Part 70 source).

- **If I am able to track my gel coat or resin usage, and then add a gun or piece of application equipment, and am able to show that my gel coat or resin usage does not increase, can't you say PTE has not changed? If so, do I have to notify IDEM of the addition of guns and am I required to modify my permit? What if I do the same with my paint guns and coating usage?**

In either the FRP or other surface coating industries, unless the change qualifies as an exemption or an insignificant activity, IDEM must be notified prior to making a change in which equipment is added. One way to qualify a change as an exemption is to demonstrate that the modification does not increase PTE. The question of whether IDEM can say that PTE has not changed in the situation described is the reason IDEM notification is necessary in the first place, so that IDEM can make such a determination.

Such a determination is not always straightforward, so IDEM cannot say categorically that the described situation is always exempt from notification and permitting. The reason for this requires some further discussion on how PTE in the FRP industry is determined.

It is IDEM's understanding from authorities in the field that the FRP industry is different from other surface coating industry sectors because the gel coats and resin materials primarily rely on fluid pumps to drive the coating fluid to the gun and not on air pressure, although air pressure is used to shape and in some cases atomize and distribute a catalyst to the fluid stream. So, in the FRP industry, quite unlike the more typical surface coating sectors, adding a gun does not allow a company to "spray" any more coating material unless the added gun has its own dedicated fluid pump.

There are exceptions. Some very low viscosity gel coats can be sprayed from a pressure pot using only air pressure, so adding a gun in this case could increase PTE if the air supply (air compressor) has the rated capacity to supply existing equipment and the new pressure pot. So now the question could be "What if we add the new pressure pot and spray gun but we only have one hose coming to the booth so that at any given time only one gun could be operated, therefore ensuring that the PTE would not be increase. What notification and permitting is necessary?" If it can be demonstrated to IDEM's satisfaction that the additional equipment cannot increase the maximum amount of material that can be applied in an hour, IDEM can agree that such a change qualifies as an exemption from construction approval. This finding can be made after the change is made, and if the source wants IDEM's official determination, the source can submit an application to receive an exemption letter from IDEM, as discussed in the "Background Permitting Information" section. However, as discussed in the "Background Permitting Information" section, changes that are exempt from construction approval may still require changes to a source's permit if the permit information is affected by the change.

It can be seen, therefore, that issues such as the "extra gun," "no extra pump," "extra gun and dedicated extra pressure pot," and "single air hose to booth" need to be addressed to answer the question of whether PTE has been changed, notification is required, and a permit revision is necessary.

Permitting

- **What are some examples of changes to a spray booth that will affect our permit? (Increase size, change spray booth locations, increase number of guns in spray booth, etc.)**

All changes can "affect" a permit in that all changes, even insignificant activities, may have to be added to the operating permit. The issue is whether the change can be made and operated prior to receiving permission by revising the operating permit. In most cases non-exempt changes require application and permission to construct and operate, and as discussed previously, most of the time it will depend on whether a proposed change increases PTE. Hence, a list of changes exempt from permitting cannot be generated easily.

Regarding the examples of changes above, if it can be shown that the change is exempt, a source modification would not be necessary and the permit may not have to be revised. Increasing the size of a booth without adding more capability to spray may not increase PTE. However, if increasing booth size allows more parts to be sprayed in an hour or allows the same number of parts per hour but allows bigger parts requiring more paint to be processed, PTE is increased and permitting is required. In most cases relocating a spray booth within an existing location can be made without notification and permitting. However, if simply relocating a spray booth "de-bottlenecks" process flow such that the booth throughput can be increased, PTE is increased and permitting is required.

Likewise, if new guns added cannot be used independently from the existing ones or if the booth is still small enough that more parts cannot be processed in an hour, addition of the guns could be considered exempt from permitting. However, it may be to the source's advantage to get an exemption letter from IDEM or revise the permit at some point so there is no question later that equipment was added to a source properly. Refer to the "Background Permitting Information" section for a discussion on how exemptions may affect a permit.

- **If I add a new gun for color changes only, do I need to modify my permit?**

IDEM understands that in the surface coating industry, aside from allowing companies to quickly address market needs, having a dedicated gun for each color can allow the company to save on flushing and cleaning solvents and can reduce emissions as well.

If the addition of the new gun can be considered exempt (i.e., if it does not increase PTE and is not subject to any rule), notification and permitting may not be necessary. However, if adding the gun enables processing in the booth to be speeded up so that more parts can be produced or coated and the maximum amount of material sprayed can be increased, PTE would be increased and permitting or a permit modification would be required. The PTE can also potentially be increased if a new color is being added that contains more HAP or VOC than is allowed by the current permit or that has a higher VOC or HAP content than the contents that were originally used to calculate PTE in the booth.

Refer to the "Background Information" section and the "How are Emissions Units Identified?" section for a discussion on how exemptions may still affect a permit.

- **Do I have to submit a construction permit [application] for changes at our source that increase our emissions, but not over permit limits?**

This question is really the same as an earlier one of whether notification is required for the same situation. Therefore, the answer is repeated. A source can make a physical change that increases actual emissions and elect to remain under current permit thresholds such as emission limits or level of permit except for registrations and MSOPs . However, such an election can only be made through an application for a source modification (Title V) or permit revision (MSOP and FESOP), and the change

cannot be made until receiving approval from IDEM in the form of a source and permit modification (Title V) or a permit revision (MSOP and FESOP). Limits on PTE apply to the equipment present at the time of permitting. Additional equipment can be added and the PTE of the added equipment can be limited as well, but permitting is again required to identify exactly which equipment has been limited.

Permit limits and emission limits are not emissions caps, which will be discussed later. New equipment that increases PTE cannot simply be added just because the existing equipment's PTE was limited. Other aspects of new equipment to be added may have to be taken into account through permitting. For instance, if the change is to an emissions unit that has an emission limit that is part of a BACT determination under 326 IAC 8-1-6, the New [VOC] Facilities; General Reduction Requirements rule, there may be more requirements of the BACT that the new equipment must comply with. IDEM may also need to determine whether the change represents construction of a new facility or emissions unit subject anew to 326 IAC 8-1-6 or 326 IAC 8-2 or the 326 IAC 2-4.1-1, the New Source Toxics Control rule. If the limit was taken to remain at a certain level of permitting (such as 99 tpy to remain a FESOP or 249 tons per year to remain a minor source not subject to PSD), new equipment added could still be subject to a BACT determination under 326 IAC 8-1-6, which would require permitting.

One of the types of streamlining provisions that was added in the Article 2 revisions that may be useful for permitting modifications includes the provisions in 326 IAC 2-6.1-6(d)(13), 2-8-10(a)(14), and 2-7-10.5(d)(9) that allow a source to add emissions units that are the same type as those that are already permitted with a lower level modification (i.e., a Notice-Only for an MSOP, an administrative permit amendment for a FESOP, or a minor source modification for a Title V). There are certain conditions that must be met before the provision can be applied. The new emissions unit must comply with the same applicable requirements and permit terms and conditions as the existing unit or units (i.e., no new applicable requirements are triggered such as 326 IAC 8-1-6), and the modification cannot result in a PTE greater than the significant thresholds in 326 IAC 2-2 or 326 IAC 2-3.

This is a complicated question, the answer to which illustrates how important PTE is and why notification of changes is required in most cases. Refer to the "Background Permitting Information" section and Tables 1 through 5 for a discussion of the types of notifications and approval time frames.

- **Do the number of guns in a particular spray booth have to match what we were permitted for in that booth?**

Not necessarily if adding new equipment was determined to be exempt. But as discussed throughout, adding new equipment is not always exempt, and IDEM cannot say categorically what are all the kinds of changes that are exempt (other than those listed) especially if the determination is based on changes in PTE. If guns have been added as exemptions, it may be advantageous to the source to obtain a letter from IDEM indicating agreement with that exemption determination. In addition, as discussed in the "Background Permitting Information" section, it may be necessary to amend the permit to change the emission unit description if it states the number of guns and that number has changed.

Emissions Caps

- **Will IDEM allow for emissions caps in permits?**

The U.S. EPA is currently working on a White Paper III which discusses methods for operational flexibility. The guidance is still in draft format and any existing caps in the U.S. are part of a federal pilot program. In 1998 Indiana incorporated emission cap language into 326 IAC 2-1.1-12 and 2-7-20; however, these rules have not yet been approved by EPA into the SIP. IDEM is currently in negotiations with EPA and hopes to have a flexible permitting program in the future. For the meantime, we can incorporate flexibility that complies with the federal new source review requirements and the Part 70 regulations. Minor sources, such as those operating under the FESOP program, can find flexible permitting options in the administrative amendment and permit revision provisions.

MISCELLANEOUS QUESTIONS

- **How can we determine ourselves if a piece of property is considered adjacent or contiguous to our current facility?**

This question becomes important when trying to determine if two or more sources of air pollution emissions should be combined as one major source for the purpose of a Title V operation permit issued under 326 IAC 2-7 or a FESOP under 326 IAC 2-8. This situation often arises where a company has several plants or divisions located in the same area or on the same property. It also occurs when a source has contractors that conduct activities creating air emissions on or in the same area as the source. The issue of on-site contractors is clarified in an IDEM nonrule policy document under identification number Air-006-NPD, issued on September 24, 1996. All these sources are referred to as collocated sources.

The term "major source" is defined in 326 IAC 2-7-1(22). The relevant part of this rule sets out three factors that must be considered. The sources must meet each of the three factors to be considered a "major source." The factors are:

1. The sources are owned or controlled by the same person, or by more than one person but all the individual persons are owned or controlled by one person (a person can be a natural person, a corporation, partnership or other legal entity);

2. The sources have the same two digit SIC code or any one source (or group of sources) supports the other source; and,

3. The sources are located on contiguous or adjacent properties.

This question regards the third requirement, that the sources are located on contiguous or adjacent properties. Contiguous properties are those that share a boundary line. The properties physically touch each other. If the properties are only separated by a road, they will usually still be contiguous,

since the road will normally not be a separate piece of property, but only an easement over one or both properties. Facilities that operate on the same piece of property will be considered to have met the requirement of being located on contiguous properties.

There is no exact physical distance standard as to how far apart two properties can be before they are not considered "adjacent" properties. Indiana case law has not defined the term "adjacent." Webster's Third New International Dictionary defines "adjacent" as "1a: not distant or far off", "1b: nearby but not touching." For purposes of the rulemaking on Prevention of Significant Deterioration, the U.S. EPA has stated that sources more than twenty (20) miles apart cannot be adjacent, even if they are connected by a railroad, pipeline, or other physical connection (see preamble to PSD, 45 FR 52676).

Each decision on whether two properties are adjacent will need to be made on a case-by-case basis. This means that there is no precise distance standard to determine how far apart two properties must be before the two may no longer be considered "adjacent." However, separate plants that do not rely upon each other to produce a product or do not produce essentially similar products are often considered to be separate sources if they are not "contiguous". If the applications for the sources are all for Title V permits (not FESOP, SSOA, etc.), a major source determination under Title V does not need to be made. Separate Title V permits can be issued to each of the sources. This is not true for sources that are major stationary sources for PSD or Emission Offset, and this document does not address sources or modifications that are subject to PSD or Emission Offset.

- **Are aerosol cans considered hand-held equipment under trivial activities?**

Aerosol cans are not considered hand-held equipment under 326 IAC 2-7-1(40)(F). The original list of trivial activities came from the US EPA document "White Paper for Streamlined Development of Part 70 Permit Applications" issued on July 10, 1995. In that document, the list of hand held equipment is limited to equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning, or machining wood, metal, or plastic. Therefore, aerosol cans do not fit into those categories. However, aerosol cans can be considered trivial if the aerosol cans are used in accordance with 326 IAC 2-7-1(40)(E), (G), (I), (M), or (Q), and they are not associated with any part of the production process and do not contribute to the PTE of the process.

Aerosol cans can be considered exempt if they meet the criteria in 326 IAC 2-1.1-3 (also refer to the discussion on exemptions in the "Background Information" section of this document). In addition, if a process at your source is permitted for using aerosol cans, you do not need to notify IDEM or modify your permit when you simply switch aerosol cans, unless you use a new aerosol material that causes the potential to emit of that process to increase.

- **When would I want to use a Source Specific Operating Agreement (SSOA) or Permit-by-Rule (PBR)?**

The following discussion was taken from the IDEM Online Environmental Permit Guide at the following web site: http://www.state.in.us/idem/guides/permit/air/airissues.html.

Source Specific Operating Agreements

IDEM has a Source Specific Operating Agreements (SSOAs) program under which specific types of activities may operate, provided they accept the pre-established terms of the SSOA "as is." Although a source may not simultaneously operate under more than one of the same type of SSOA or under a SSOA and some other type of operating permit (such as operating under a SSOA and a FESOP), sources can operate under up to four different SSOAs as long as the total PTE for any regulated pollutant, as limited by the SSOAs, does not exceed major source levels. In all, there are 23 separate SSOAs available to applicants, covering 13 specific types of activities. Although final issuance of a SSOA is appealable, there is no public comment period. There is an initial permit fee; however, SSOAs do not have an annual fee. Sources with SSOAs must file an annual Compliance Certification. SSOAs also do not need to be renewed so long as the source complies with the operational limits in the agreement.

Those operating under a SSOA not only avoid participation in an operating permit program, but in some instances can also avoid the need for a construction permit because certain SSOAs limit emissions to below 25 tons per year (TPY), which is the construction permit (New Source Construction Permit) threshold. However, the annual "actual emission" limits of SSOAs range from equal to or less than 2 TPY for the Surface Coatings or Graphic Arts in Lake or Porter County SSOA to the equal to or less than 100 TPY limit for large Sand and Gravel or for Coal Mine or Coal Preparation SSOAs.

Permit-by-Rule

Those sources whose actual emissions (not PTE) – without the use of pollution control devices – are 20% of the major source thresholds of a Title V Operating Permit, or less, may operate under a Permit-by-Rule. In other words, sources located within an attainment area that have actual emissions of less than 20 tons per year (TPY) of carbon monoxide, oxides of nitrogen (NOx), sulfur dioxide (SO2), volatile organic compounds (VOCs), particulate matter, or particulate matter smaller than 10 microns (PM-10), less than 2 TPY of lead or any other single hazardous air pollutant(HAP), or less than 5 TPY of a combination of HAPs are eligible to operate under a Permit-by-Rule.

Similarly, if a source is located in an area where major source threshold levels for a specific pollutant have been lowered because that area is in non-attainment for that pollutant, then a source must have actual emissions that are 20% or less of that area-specific threshold in order to participate in the

Permit-by-Rule program. For example, sources located within Lake or Porter Counties where 25 TPY is the major source threshold for VOCs (because those counties are in non-attainment for VOCs) would have to have actual emissions for VOCs of less than 5 TPY to qualify to participate in the Permit-by-Rule program.

Sources must have current New Source Review (construction) permits in place, and be operating under the conditions therein, for at least 12 months before they may operate under the Permit-by-Rule. In other words, sources that might have actual emissions that are low enough to allow them to operate under the Permit-by-Rule must first operate for one year under the conditions or requirements associated with a Registration or New Source Construction Permit, which itself may have been transitioned into a MSOP, FESOP, or Part 70 operating permit.

If, during this operating period records on production, fuel and materials usage, or other variables demonstrate conclusively that the actual emissions of the source were 20% of the major source threshold levels or less, and the source is confident it will be able to consistently demonstrate such compliance over any 12-month period, the source may be eligible to operate under Permit-by-Rule in lieu of the operating conditions of its construction permit or MSOP, FESOP, or Part 70 operating permit, all of which are based on PTE rather than on actual emissions. Sources operating under a Source Specific Operating Agreement (SSOA) also may opt to operate instead under the Permit-by-Rule.

Eligible sources wishing to operate under the Permit-by-Rule must first request that IDEM revoke their current operating permit. Sources operating under the Permit-by-Rule also need not request IDEM approval for future source modifications so long as actual emissions remain at 20% of major source threshold levels [20 tons per year (TPY) of carbon monoxide, oxides of nitrogen (NOx), sulfur dioxide (SO2), volatile organic compounds (VOC), particulate matter, or particulate matter smaller than 10 microns (PM-10), and less than 2 TPY of lead or any other single hazardous air pollutant(HAP), or less than 5 TPY of a combination of HAPs], except that source modifications subject to federal requirements must still be pre-approved. Source modifications that would raise the actual emissions above the 20% of major source threshold levels would require that the source transition into a different operating permit program, and such modifications must be pre-approved.

Again, sources opting to operate under the Permit-by-Rule must be able to demonstrate compliance for every 12-month period, within 30 days of receiving a request from IDEM or U.S. EPA. There also are Permit-by-Rule programs for specific source categories (See 326 IAC 2-11): gasoline dispensing operations, grain elevators, and grain processing or milling.

- **If you have a construction permit at the time the federal MACT [Section 112(d)] standard for this industry is proposed, will you be considered a new source for federal standard?**

The definition of "new source" for the purposes of MACT standards is in 40 CFR 63.2 and is as follows:

> "New source means any affected source the construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard under this part."

The definition of "construction" for the purposes of MACT standards is in 40 CFR 63.2 and is as follows:

> "Construction means the on-site fabrication, erection, or installation of an affected source."

IDEM believes that a source that begins to construct after the date the MACT standard for this industry is proposed will be considered a new source subject to the new source requirements of the standard. If the source is not constructed prior to the MACT standard proposal date, simply having a construction permit or a source modification approval prior to that date will not qualify the source to be an existing source.

- **Can we have 45 days instead of 30 to compile records (such as purchase records) for reporting?**

IDEM, OAQ believes that 30 days is sufficient time to compile records for compliance determination and reporting. It is important that the source keeps records required by a permit, so the source can determine if it is out of compliance as soon as possible. Therefore, 30 days seems like a reasonable amount of time for compilation of the reporting information.